Appl. No. 10/541,964
Amdt. Dated May 13, 2009

Attorney Docket No. 81864.0070
Customer No.: 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended)   An R-T-B rare earth permanent magnet, which comprises a sintered body comprising at least: main phase grains comprising $R_2T_{14}B$ compounds (wherein R represents one or more rare earth elements, providing that the term "rare earth element" include Y (yttrium), and T represents one or more transition metal elements essentially containing Fe, or Fe and Co); and a grain boundary phase having a higher amount of R than said main phase grains,

which is characterized in that said sintered body satisfies the following formulas:

$AVE(X)/Y = 0.8$ to 1.0; and

$(X/Y)max/(X/Y)min = 2.0$ to 13.0,

wherein X represents (the amount of heavy rare earth elements) (wt%) /(the amount of all the rare earth elements (wt%)) for a given number of said main phase grains in said sintered body;

Y represents (the amount ~~ratio~~ of heavy rare earth elements(wt%))/(the amount ratio of all the rare earth elements (wt%)) for said sintered body as a whole;

$AVE(X)$ represents the mean value of X obtained for the given number of said main phase grains;

$(X/Y)min$ represents the minimum value of (X/Y) obtained for the given number of said main phase grains; and

$(X/Y)max$ represents the maximum value of (X/Y) obtained for the given number of said main phase grains.

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2. (Previously presented) The R-T-B rare earth permanent magnet according to claim 1, characterized in that said sintered body satisfies the formulas: $(X/Y)min = 0.1$ to 0.6; and $(X/Y)max = 1.0$ to 1.6.

3. (Previously presented) The R-T-B rare earth permanent magnet according to claim 1, characterized in that said sintered body satisfies the formula: $AVE(X)/Y = 0.82$ to 0.98.

4. (Previously presented) The R-T-B rare earth permanent magnet according to claim 1, characterized in that said sintered body satisfies the formula: $(X/Y)max/(X/Y)min = 3.0$ to 10.0.

5. (Previously presented) The R-T-B rare earth permanent magnet according to claim 1, characterized in that said sintered body satisfies the formulas: $(X/Y)min = 0.1$ to 0.5; and $(X/Y)max = 1.1$ to 1.5.

6. (Previously presented) The R-T-B rare earth permanent magnet according to claim 1, characterized in that 85% or more of the total area occupied by said main phase grains is occupied by grains having a grain size of 15 μm or smaller.

7. (Previously presented) The R-T-B rare earth permanent magnet according to claim 1, characterized in that 85% or more of the total area occupied by said main phase grains is occupied by grains having a grain size of 10 μm or smaller.

8. (Previously presented) The R-T-B rare earth permanent magnet according to claim 1, characterized in that said magnet has a composition consisting essentially of 25 to 37 wt% of R, 0.5 to 1.5 wt% of B, 0.03 to 0.3 wt% of Al, 0.15 wt%

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or less of Cu (excluding 0), 2 wt% or less of Co (excluding 0), and the balance substantially being Fe.

9.   (Previously presented)   The R-T-B rare earth permanent magnet according to claim 8, characterized in that said magnet comprises 0.1 to 8.0 wt% of heavy rare earth elements as R.

10-15. (Canceled)